

# Loamy Depressions (M135A\_550)

## Ecoregion Classification

**Section:** Alaska Mountains (M135A)

**Subsection(s):** Glaciated Lowlands (M135A.G1L)

## Physiographic Features

**Elevation (meters):** *RV* 600 *Range* 475 to 878

**Slope Gradient (percent):** 3 0 to 30

**Aspect (clockwise direction):** non-influencing

**Landform:** kettles on hills; kettles on outwash plains

**Flooding:** *Frequency* None

**Ponding:** None

## Climatic Features

**Annual Precipitation (millimeters):** *RV* 582 *Range* 506 to 732

**Annual Air Temperature (°C):** -2.8 -3.2 to -2.5

**Frost Free Days:** 70 60 to 80

## Soil Features

**Parent Materials:** silty eolian deposits over sandy and gravelly outwash

**Rooting Depth (cm):** *RV:* 23 *Range:* 2 to 58

## Soil Layers and Properties within Representative Rooting Depth:

Layers are described from the surface downward. If more than one texture is listed, the predominant texture is listed first. AWC = available water capacity. CEC = cation exchange capacity.

Thickness (cm)	Texture	Permeability	AWC (cm/cm)	pH	Effective CEC (me/100g)	CEC (me/100g)
7	slightly decomposed plant material	moderately rapid	.34	5.1	30	
16	silt loam	moderate	.40	5.4	12	

**Restrictive Features:** strongly contrasting textural stratification at 58 cm

**Water Table (May to September):** 0 to 50 cm

**Drainage Class:** somewhat poorly drained

## Vegetation Features

### Common Vegetation Types:

Vegetation Type	Ecological Status
Graminoid herbaceous meadow	Climax plant community

### Ecological Status-Transition Description:

A single plant community with graminoid herbaceous meadow is identified on this site. No transitional pathways to other communities have been identified for this site. The concave surface relief typical of this site favors snow drifting during winter followed by temporary saturation of soils during early summer from snow melt

### Vascular Plant Species Richness:

Vascular plant species richness is based on 1999-2002 field season data only. Data from 1997 and 1998 were not used in the calculations.

Vegetation Type	Total	Min.	Avg.	Max.	Number of Stands
Graminoid herbaceous meadow	15	15	15	15	1

### Notable Plants:

Notable plants include rare plants, range extensions, and plants little known from Denali National Park and Preserve.

Vegetation Type	Symbol	Scientific Name
Graminoid herbaceous meadow	DAIN	Danthonia intermedia

## Characteristics of Graminoid herbaceous meadow

**Ecological Status:** Climax plant community

### Plant Species Cover, Constancy, and Importance:

Cover, constancy, and importance are based on 1997-2002 field season data. Number of stands sampled = 4. Only those vascular, lichen, and bryophyte species with average cover >=5% and constancy >=15% are listed.

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
GM	CACA4	Calamagrostis canadensis	15.0	37	70	75	53
GM	FEAL	Festuca altaica	25.0	48	70	50	49
GM	ZZGRAM	unknown-graminoids	35.0	35	35	25	30
GM	POA	Poa	25.0	25	25	25	25
GM	CAREX	Carex	20.0	20	20	25	22
GM	CAPO	Carex podocarpa	10.0	10	10	25	16
GM	CALAM	Calamagrostis	5.0	5	5	25	11
FM	POAC	Polemonium acutiflorum	3.0	5	7	75	19
FD	RUAR	Rubus arcticus	15.0	15	15	25	19
FD	VIEPR	Viola epipsila ssp. repens	15.0	15	15	25	19
FD	VIOLA	Viola	10.0	10	10	25	16
L	LICHEN	total lichens	0.0	9	15	100	30
M	MOSS	total bryophytes-mosses and liverworts	20.0	34	60	100	58
M1	POLYT5	Polytrichum	15.0	38	60	50	44
M1	ZZMOSS	unknown-mosses	10.0	10	10	25	16
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	15.0	46	80	100	68
B	LITTER2	litter-woody debris >2.5 cm	0.0	0	0	100	0
B	SOIL	mineral-bare soil	0.0	0	0	100	0
B	ROCK	mineral-surface rock fragments	0.0	0	0	100	0
B	WATER	water	0.0	0	0	100	0

### Stratum Height:

Stratum height is based on 1997-2002 field season data. All plant species and ground layer records from all stands are included in the calculations.

Stratum Name	Included Strata	Height			Units	Number of Records
		Min.	Avg.	Max.		
Tree regeneration	TR	0.3	0.3	0.3	m	1
Medium shrubs	SM	1.1	1.1	1.1	m	1
Low shrubs	SL	50.0	56.7	70.0	cm	3
Dwarf shrubs	SD	20.0	20.0	20.0	cm	1
Tall and medium grasses and grass-likes	GT, GM	30.0	40.0	50.0	cm	2
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	2.0	4.5	10.0	cm	4

### Mapunit Components

#### Common Name (Soils Name):

Boreal-meadow loamy outwash slope depressions (Oxyaquic Eutrocrypts, coarse-silty over sandy-skeletal)

#### Soil Map Units

Only those map units in which the landtype is a major component are listed. The landtype also may occur as a minor component in other map units.

#### Symbol: Common Name (Soils Name):

7P2 Boreal Glaciated Plains and Hills  
(Typic Eutrocrypts, sandy-skeletal-Typic Eutrocrypts, coarse-silty over sandy-skeletal Association, 0 to 30 percent slopes)

### Geographically Associated Landtypes

#### M135A\_350—Gravelly and Sandy Slopes:

This site occurs on somewhat excessively drained soils with thin loamy surface mantles. The climax plant community is "White spruce/shrub birch woodland."

#### M135A\_500—Pond Margins:

This site occurs on soils that are wetter. The climax plant community is "Sedge wet meadow."